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**Table 17.01-- CONSUMPTION OF ENERGY, BY SOURCE
(PHYSICAL UNITS): 1960 TO 2005**

Year	Coal 1/ (1,000 short tons)	Natural gas 2/ (billion cubic feet)	Petroleum (1,000 barrels)	Hydroelectric power 3/ (million kWh)
1960	-	-	16,844	27
1965	-	-	22,478	105
1970	-	-	34,105	108
1975	-	-	37,097	89
1980	-	3	43,562	86
1985	46	2	40,006	86
1990	29	3	50,015	80
1991	45	3	45,758	71
1992	303	3	46,655	61
1993	691	3	41,392	56
1994	704	3	44,843	139
1995	895	3	43,842	98
1996	930	3	41,631	104
1997	933	3	39,824	115
1998	822	3	40,484	121
1999	801	3	39,662	115
2000	816	3	40,591	103
2001	829	3	41,479	101
2002	748	3	45,068	95
2003	837	3	46,963	91
2004	857	3	49,029	94
2005	805	3	51,262	96

1/ The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

2/ Includes supplemental gaseous fuels.

3/ Includes hydroelectric pumped storage and conventional hydroelectric power.

Source: U.S. Department of Energy, Energy Information Administration, *State Energy Data 2005*
<http://www.eia.doe.gov/emeu/states/sep_use/total/pdf/use_hi.pdf> table 7 accessed April 3, 2008.

Table 17.02-- CONSUMPTION OF ENERGY, BY SOURCE: 1960 TO 2005

[Trillion Btu]

Year	Total	Coal 1/	Natural gas 2/	Petro-leum	Hydro-electric power 3/	Biomass 1/ 4/	Other 1/ 5/
1960	94.9	0.0	0.0	94.6	0.3	0.0	0.0
1965	130.6	0.0	0.0	129.3	1.1	0.2	0.0
1970	197.0	0.0	0.0	195.4	1.1	0.4	0.0
1975	214.4	0.0	0.0	212.9	0.9	0.6	0.0
1980	265.4	0.0	3.0	249.6	0.9	11.9	0.0
1985	251.4	1.1	2.7	232.1	0.9	14.2	0.4
1990	6/ 324.4	0.7	3.0	292.7	0.8	6/ 25.9	6/ 1.2
1991	298.1	1.1	2.9	266.5	0.7	25.4	1.4
1992	308.9	6.8	2.9	272.4	0.6	24.9	1.3
1993	287.6	15.6	2.8	239.7	0.6	24.4	4.5
1994	304.3	15.7	2.9	258.3	1.4	20.7	5.2
1995	302.5	19.9	2.9	252.6	1.0	19.8	6.3
1996	288.7	20.4	2.8	238.9	1.1	19.1	6.6
1997	278.9	20.5	2.7	230.5	1.2	17.4	6.6
1998	278.8	18.2	2.8	233.4	1.2	16.5	6.5
1999	274.6	17.7	2.9	229.9	1.2	17.0	6.0
2000	279.1	17.7	3.0	235.2	1.1	15.2	7.1
2001	7/ 279.0	17.8	2.9	239.8	1.0	7/ 11.7	5.7
2002	7/ 292.1	16.6	2.9	259.2	1.0	7/ 9.5	2.9
2003	7/ 310.0	19.3	2.9	270.1	0.9	7/ 11.7	5.2
2004	323.5	19.3	2.9	282.6	0.9	11.8	6.0
2005	333.4	18.0	2.9	295.2	1.0	10.1	6.3

1/ The continuity of these data series estimates may be affected by changing data sources and estimation methodologies.

2/ Includes supplemental gaseous fuels.

3/ Includes hydroelectric pumped storage and conventional hydroelectric power.

4/ Wood and waste.

5/ "Other" is geothermal, wind, photovoltaic, solar thermal energy and net imports of electricity.

6/ There is a discontinuity between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

7/ Revised from previous *Data Book*.

Source: U.S. Department of Energy, Energy Information Administration, *State Energy Data 2005*
<http://www.eia.doe.gov/emeu/states/sep_use/total/pdf/use_hi.pdf> table 7 accessed April 3, 2008.

**Table 17.03-- CONSUMPTION OF ENERGY BY END-USE SECTOR:
1960 TO 2005**

[Trillion Btu]

Year	Residential	Commercial 1/	Industrial	Transportation	Electric power 2/
1960	7.3	5.2	20.6	61.8	17.6
1965	10.1	6.8	34.7	79.0	27.6
1970	16.4	11.6	43.7	125.3	43.2
1975	19.6	13.8	50.4	130.5	58.8
1980	23.2	20.8	74.7	146.7	69.7
1985	20.9	20.2	67.4	3/ 142.9	70.0
1990	4/ 31.6	4/ 39.3	4/ 98.9	154.5	4/ 105.9
1991	27.0	30.8	89.0	151.2	88.7
1992	31.1	40.0	93.7	144.1	99.3
1993	30.8	33.2	93.1	130.4	101.1
1994	31.9	37.7	94.7	140.0	104.3
1995	32.8	37.5	94.1	138.2	108.0
1996	33.6	36.8	96.7	121.6	110.0
1997	33.9	37.7	90.1	117.2	110.0
1998	34.8	47.3	82.1	114.6	108.2
1999	34.3	37.8	79.4	123.1	108.9
2000	35.3	39.0	79.6	125.2	111.3
2001	34.8	38.7	5/ 73.4	132.0	109.4
2002	36.9	41.0	5/ 72.4	141.8	113.7
2003	36.2	42.1	5/ 68.2	163.6	113.3
2004	36.6	47.4	67.7	171.7	113.4
2005	37.1	45.4	71.5	179.4	112.4

1/ Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

2/ Replaces Electric Utilities of previous years.

3/ There is a discontinuity between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

4/ There is a discontinuity between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

5/ Revised from previous *Data Book*.

Source: U.S. Department of Energy, Energy Information Administration, *State Energy Data 2005* <http://www.eia.doe.gov/emeu/states/sep_use/total/pdf/use_hi.pdf> tables 8, 9, 10, 11 and 12 accessed April 3, 2008.

**Table 17.13-- SERVICE PROVIDED BY HAWAIIAN ELECTRIC COMPANY, INC.,
ON OAHU: 1991 TO 2007**

Year	Number of customers, Dec. 31		Net input 1/ (1,000 kWh)	Electricity sales (1,000 kWh)	Average annual residential use 2/ (kWh)	Average residential rate (dollars per kWh)	Generating capability Dec. 31 3/ (1000 kW)
	Total	Residential only					
1991	255,176	223,304	6,876,964	6,538,952	7,610	0.09354	1,440
1992	257,442	225,229	7,061,157	6,650,449	7,711	0.09925	1,666
1993	263,478	230,192	7,029,839	6,607,424	7,581	0.11414	1,669
1994	264,992	232,115	7,222,978	6,797,364	7,681	0.11342	1,669
1995	269,307	235,905	7,359,195	6,962,794	7,732	0.12302	1,669
1996	271,602	237,860	7,499,202	7,091,147	7,868	0.12944	1,669
1997	271,801	238,825	7,424,259	7,040,291	7,773	0.13360	1,669
1998	272,675	239,945	7,299,149	6,938,326	7,603	0.12556	1,669
1999	275,467	242,579	7,356,725	6,997,936	7,654	0.12741	1,669
2000	278,260	245,027	7,589,409	7,211,760	7,793	0.14477	1,669
2001	280,911	247,672	7,643,288	7,276,681	7,816	0.14255	1,669
2002	283,161	249,896	7,757,699	7,390,367	8,050	0.13859	1,669
2003	286,677	253,033	7,908,957	7,522,230	8,224	0.14888	1,669
2004	288,456	254,797	8,126,998	7,732,834	8,481	0.15690	1,669
2005	291,580	257,804	8,104,303	7,721,296	8,360	0.17673	1,712
2006	292,988	259,098	8,104,872	7,700,605	8,248	0.20063	1,722
2007	294,591	260,583	8,089,115	7,675,355	8,214	0.20519	1,727

1/ Net generation plus purchased power.

2/ Based on average number of customers during the year.

3/ Gross capability including firm purchase power.

Source: Hawaiian Electric Company, Inc., records.

**Table 17.14-- SERVICE PROVIDED BY THE GAS COMPANY, INC.,
ON OAHU: 1991 TO 2007**

Calendar year	Customers, Dec. 31		Gas sold 1/ (1,000 therms)		Average annual residential usage 1/ (therms)
	Total	Residential	Total	Residential	
1991	32,487	29,278	30,866	5,331	182
1992	32,598	29,375	30,528	5,285	180
1993	33,206	29,984	30,027	5,287	176
1994	33,597	30,344	30,762	5,372	177
1995	33,472	30,492	30,582	5,332	175
1996	33,914	30,668	30,339	5,203	170
1997	33,800	30,574	29,836	5,176	169
1998	33,705	30,497	29,930	5,284	173
1999	33,614	30,384	30,830	5,154	170
2000	33,613	30,383	31,619	5,054	166
2001	33,625	30,403	31,071	4,990	164
2002	33,446	30,202	30,852	4,962	164
2003	33,252	29,990	30,470	4,781	159
2004	33,231	29,964	31,011	4,701	157
2005	32,991	29,744	30,965	4,641	156
2006	32,776	29,519	30,935	4,530	153
2007	32,649	29,413	31,346	4,459	152

1/ Includes liquefied petroleum gas.

Source: The Gas Company, records.

Table 17.15-- LIQUID FUEL TAX BASE: 1993 TO 2007

[In thousands of gallons. Liquid fuel sold in a given month is usually reported the following month.
Annual totals accordingly refer to fuel sold during a 12-month period ending November 30]

Year reported	All types		Gasoline	Diesel oil	
	Total	Excluding aviation		Non-hwy.	Hwy. use
1993	1,173,458	573,767	384,444	160,121	24,997
1994	1,240,366	578,758	392,404	152,628	29,692
1995	1,286,038	600,596	396,446	172,684	27,411
1996	1,147,866	588,896	394,989	160,102	29,864
1997	955,834	585,400	400,435	150,737	30,109
1998	954,860	597,410	394,674	169,930	28,983
1999	969,434	621,832	384,260	201,664	32,098
2000	1,053,114	684,247	400,920	246,426	33,282
2001	962,973	627,076	409,910	179,000	34,018
2002	994,141	646,185	429,613	175,096	36,157
2003	835,991	587,927	452,499	91,988	37,004
2004	1,066,808	727,943	459,321	220,562	43,223
2005	972,642	647,843	454,115	146,922	43,440
2006	869,789	657,355	472,658	131,665	50,065
2007	1,018,233	782,580	480,632	215,503	66,030

Year reported	Liquefied petroleum gas		Aviation fuel	Small boats		Other fuel
	Off hwy.	Hwy. use		Gasoline	Diesel oil	
1993	3,343	477	599,691	35	349	(X)
1994	3,210	566	661,608	60	198	(X)
1995	3,096	514	685,443	50	395	(X)
1996	3,249	413	558,969	50	228	(X)
1997	3,587	328	370,433	41	164	(X)
1998	3,280	383	357,450	9	151	(X)
1999	3,326	360	347,602	4	119	(X)
2000	3,250	332	368,867	2	35	(X)
2001	3,783	310	335,897	9	47	(X)
2002	4,991	267	347,956	5	40	16
2003	5,739	391	248,065	2	22	281
2004	3,368	246	338,866	8	16	1,200
2005	1,222	300	324,799	15	42	1,786
2006	1	142	212,434	23	45	2,756
2007	2,106	108	235,653	262	626	17,314

X Not applicable.

Source: Hawaii State Department of Taxation, Tax Research & Planning, "Liquid Fuel Tax Base & Tax Collections" (annual release); <http://www.hawaii.gov/tax/a5_3txcolrptarchive.htm> accessed March 31, 2008.

Table 17.16-- LIQUID FUEL TAX BASE, BY COUNTY: 2007

[In thousands of gallons. Liquid fuel sold in a given month is usually reported the following month.
Annual totals accordingly refer to fuel sold during a 12-month period ending November 30]

Type of fuel	State total	City and Co. of Honolulu	County of Maui	County of Hawaii	County of Kauai
Total	1,018,233	623,765	152,301	153,875	88,292
Gasoline	480,632	299,311	62,629	82,118	36,575
Diesel oil, non-hwy.	215,503	163,333	12,560	15,665	23,944
Diesel oil, hwy. use	66,030	39,091	9,019	13,079	4,841
Liq. pet. gas, off hwy.	2,106	2,106	-	-	-
Liq. pet. gas, hwy. use	108	88	7	7	5
Small boats, gasoline	262	186	-	62	13
Small boats, diesel oil	626	17	61	373	175
Aviation fuel	235,653	118,017	67,643	32,722	17,270
Other fuel	17,314	1,616	382	9,848	5,468

Source: Hawaii State Department of Taxation, Tax Research & Planning, "Liquid Fuel Tax Base & Tax Collections" (annual release); <http://www.hawaii.gov/tax/a5_3txcolrptarchive.htm> accessed March 31, 2008.

**Table 17.17-- GASOLINE STATIONS (NAICS 447), BY COUNTY:
1997 TO 2005**

[Excludes most government employees, railroad employees, and self-employed persons.
Statistics based on the North American Industry Classification System (NAICS)
which replaced the Standard Industrial Classification (SIC) system used in the
County Business Patterns prior to 1998. Therefore, comparability between the current
data and data prior to 1998 may be limited]

Year	State total	City and County of Honolulu	Hawaii County	Kauai County	Maui County
1997 1/	318	196	63	19	40
1998	350	219	67	19	45
1999	334	206	63	19	46
2000	328	207	61	20	40
2001	322	204	61	17	40
2002	321	200	62	19	40
2003	314	194	63	19	38
2004	294	181	60	18	35
2005	301	188	59	19	35

1/ *County Business Patterns* data from before 1998 reported in SIC (SIC 554) rather than NAICS.

Source: U.S. Census Bureau, *County Business Patterns, Hawaii* (annual). See also

<<http://censtats.census.gov/cbpnaic/cbpnaic.shtml>> accessed December 5, 2007.

**Table 17.23-- RESEARCH AND DEVELOPMENT EXPENDITURES AT
DOCTORATE-GRANTING INSTITUTIONS: FISCAL YEARS 1991 TO 2005**

[In thousands of dollars]

Year	Total	Federally financed	State and local government financed	Industry financed	Institutionally financed	All other sources
1991	78,166	44,857	27,321	856	3,391	1,741
1992	80,258	47,684	26,775	337	3,319	2,143
1993	73,961	41,362	27,099	151	3,109	2,240
1994	70,079	39,392	25,204	434	3,290	1,759
1995	78,429	44,238	26,789	299	3,738	3,365
1996	111,202	66,902	31,826	8,088	4,386	-
1997	120,107	72,421	28,440	5,944	13,297	5
1998	148,007	86,886	37,002	10,949	13,170	-
1999	156,810	93,418	35,111	13,021	15,260	-
2000	161,300	95,419	35,474	11,158	19,249	-
2001	156,976	97,716	33,125	7,232	18,903	-
2002	172,664	119,381	31,062	9,971	12,232	18
2003	184,602	148,662	11,822	6,931	17,171	16
2004	241,346	191,252	8,815	21,234	19,892	153
2005	240,247	199,135	7,077	12,155	21,282	598

Source: National Science Foundation, Division of Science Resources Statistics, *Academic Research and Development Expenditures. Fiscal Year 2005*, NSF 07-318 (May 2007),
<<http://www.nsf.gov/statistics/nsf07318/pdf/nsf07318.pdf>> accessed October 29, 2007.

Table 17.24-- PATENTS ISSUED TO HAWAII RESIDENTS: 1984 TO 2007

Calendar year	Patents	Calendar year	Patents	Calendar year	Patents
1984	39	1992	81	2000	93
1985	38	1993	106	2001	107
1986	46	1994	99	2002	91
1987	46	1995	84	2003	96
1988	62	1996	104	2004	86
1989	71	1997	93	2005	58
1990	85	1998	93	2006	101
1991	80	1999	97	2007	82

Source: U.S. Patent and Trademark Office, Information Products Division/TAF Branch, *Patent Counts by Country/State and Year, All Patents, All Types, January 1, 1977 -- December 31, 2007* (March 2008)
<http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_all.pdf> accessed April 21, 2008.